



# CARLETON UNIVERSITY

Ottawa, Ontario

Canada

*128th Convocation*  
Thursday, June 15, 2006



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*Carleton University*  
*2006 Spring Convocation*

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Master of Engineering (Mechanical)	
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## History

Carleton University is unique within the Ontario university system for several reasons. It was founded in 1942 through a community movement, initiated by the YMCA, to provide non-sectarian education for the thousands of men and women who came to Ottawa in support of the war effort. Because of these roots, Carleton has, throughout its history, attempted to meet the needs of the community by making its programs and resources widely available through innovative technologies and life-long learning opportunities.

Today, Carleton stands among the best comprehensive universities in Canada. It is a dynamic, research-intensive university, committed to ensuring an outstanding learning experience for its more than 23,000 students. The University offers 65 programs of study in areas as diverse as public affairs, journalism, art and culture, engineering, high technology, and international studies.

Carleton awarded its first degrees in 1946, three in public administration and three in journalism. Sixty years later, the University has reached another milestone as we celebrate our 100,000<sup>th</sup> graduate.

Today's Convocation ceremony (the calling together of the academic assembly) has its roots in university traditions of medieval Europe.



## Coat of Arms

The coat of arms was presented to the University by His Excellency The Right Honourable Ramon John Hnatyshyn, Governor General of Canada, on November 15, 1992, as part of Carleton's 50<sup>th</sup> anniversary celebrations. It is described in heraldic terms as follows: "Sable a maple leaf Gules irradiated and charged with an open book Argent; And for a Crest: on a wreath Argent Sable and Gules a Phoenix Gules quilled and beaked Or issuing from flames proper; And for a Motto: Ours the Task Eternal; And for Supporters: on a grassy mount on either side a raven Sable beaked and membered or armed Gules."

The open book on the maple leaf signifies that Carleton University is in the nation's capital and that learning is open to all who wish to partake of it. The phoenix, the legendary eternal bird, symbolizes the renewing of learning from older foundations, in recognition of Henry Marshall Tory's role in the founding of the University when he was 78 years old. "Ours the Task Eternal" is taken from a Walt Whitman poem entitled "Pioneers" and ties in with the eternal quality of the phoenix.

And so, the Carleton University coat of arms symbolizes sound learning, good citizenship, and the highest hopes of humanity.



## The Mace

The mace is a staff symbolizing authority. In the days of knighthood, it was a weapon, but after the 16th century it became solely a symbol of authority carried by a distinguished member of an assembly. It is used on ceremonial occasions to signify the right of an individual or institution to perform a certain function—in the case of universities, to grant degrees.

At Convocation, the mace is carried ahead of the Chancellor as he enters and leaves each ceremony. During the ceremony the mace is displayed on a special stand as an embodiment of the authority of the University.

Carleton's mace was presented to the University in 1976 as a gift from the Chair of the Board of Governors at that time, Mr. Hyman Soloway. It is a silver-plated staff approximately three feet long. At the upper end there is a bowl marked with the University's coat of arms and the University motto in both Latin and English—"Opera Nobis Aeterna" and "Ours the Task Eternal." From the upper portion of the bowl rises a phoenix. Traditional oak leaves surround the lower end of the staff.

## The Diploma

The diploma the graduates receive at Convocation is the certificate of qualification which publishes the fact that the student has fulfilled all the requirements and completed the prescribed course of study for the degree. As the senior academic legislative body of the University, it is the Senate which has determined whether the requirements have been met. The signatures of both the Chancellor and the President of the University appear on the diploma: the Chancellor because of his role in conferring the degree, and the President who, as Chair of Senate, certifies that Senate has enacted the required motion to award the degree. The Seal of the University is affixed to the diploma as a mark of authentication.

## Academic Dress

The academic dress of Carleton University results from a compromise between that found in the ancient foundations of Britain and Canada and the American Intercollegiate Code. All three hoods—bachelor's, master's, and doctor's—are of the simple or Oxford shape. The bachelor's hood is made of black stuff; the master's and doctor's are made of black silk and all are lined with silver silk with two chevrons, one of red and one of black. From bachelor's to doctor's, the hoods are progressively longer and opened to show more and more of the lining.

The velvet border of the hoods denotes the degrees granted according to the following colour combinations: applied science is orange with a black cord sewn slightly in from the lower border; architecture is cerise; architectural studies is cerise with a black cord sewn slightly in from the lower border; arts is white; commerce is camel brown; computer



science is royal blue; engineering is orange; humanities is white with a red cord sewn slightly in from the lower border; industrial design is dark cardinal; international business is camel brown with a red cord sewn slightly in from the lower border; journalism is white with a black cord sewn slightly in from the lower border; management studies and business administration is camel brown with a black cord sewn slightly in from the lower border; mathematics is hunter green; music is venetian pink; public administration is peacock blue; public affairs and policy management is teal with a gold cord sewn slightly in from the lower border; science is golden yellow; social work is cream; and doctor of philosophy is purple.

The master's and bachelor's gowns, to be worn with the above hoods, are of full length, made of black stuff, with a gathered yoke behind, and long open-fronted sleeves. The doctoral gown is of full-style, made of fine royal blue cloth with facings of light blue silk, with a full gathered yoke behind, and closed sleeves with an opening at the elbows.

The two shades of blue in the doctoral gown are those of the United Nations, and are meant to recognize the University's long-standing interest, from its earliest years, in international affairs and issues. The colours were chosen when the University awarded its first honorary degree, in 1954, to the second Secretary General of the United Nations,

the late Dag Hammarskjöld. The tradition of awarding honorary degrees to Secretaries General of the United Nations has continued since that time.

The gown of the honorary Doctor of Laws, Literature, Music, Science, Engineering, Architecture or Fine Arts is a full robe with bell-shaped sleeves. It is made of fine royal blue cloth with facings and sleeves in light blue silk. The hood is made of the same material as the gown, has the same lining as that for the degrees granted by examination, and is bordered with dark mauve for the degree of Doctor of Laws; vibrant blue for the degree of Doctor of Literature; venetian pink for the degree of Doctor of Music; red for the degree of Doctor of Science; orange for the degree of Doctor of Engineering; cerise for the degree of Doctor of Architecture; and dark cardinal for the degree of Doctor of Fine Arts.

#### *Alumni Park*

Weather permitting, today's Convocation reception will be held outdoors in Alumni Park, which was dedicated in 1992 at the initiative of the Carleton University Alumni Association to commemorate the University's 50<sup>th</sup> anniversary. The picturesque fountain pool, lush flower gardens, tall trees, and a spectacular view of the Rideau River make this park a favourite meeting place for students, faculty, and staff, and an excellent location to take commemorative photos.



*The Presiding Officer of Convocation is the Chancellor of the University, Marc Garneau, C.C., C.D., B.Sc., Ph.D., LL.D., P.Eng.*

Accompanying him on the podium are David Dunn, B., Arch., representing the Board of Governors, and David W. Atkinson, B.A., M.A., Ph.D., President and Vice-Chancellor.

*Assisting the Chancellor are:*

Brian C. Mortimer, B.Sc., M.Sc., Ph.D.,  
Associate Professor of Mathematics,  
Assistant Provost and Clerk of Senate,  
and Marshal of Convocation

Donald Russell, B.Eng., M.S., Ph.D., P.Eng.,  
Associate Professor of Engineering,  
and Associate Marshal of Convocation

Don Bailey, B.Eng., M.Eng., P.Eng.,  
Instructor in Engineering,  
and Beadle of Convocation

Frederick Michel, B.Sc., M.Sc., Ph.D.,  
Associate Professor of Earth Sciences and Environmental  
Studies,  
and Beadle of Convocation

Kitty Krupop, B.P.E.  
Development Officer,  
and Beadle of Convocation

Patricia Patrick, B.A.,  
Acting Degree Audit Specialist,  
and Beadle of Convocation

Cheryl Schramm, B.Eng., M.Eng., P.Eng.,  
Instructor in Engineering,  
and Beadle of Convocation

Brian Burns, B.Sc., M.A., M.Phil.,  
Associate Professor of Industrial Design

Jason Etele, B.Eng., M.App.Sc., Ph.D.,  
Assistant Professor of Engineering

Gil Hartley, B.A., M.Eng., Ph.D., P.Eng.,  
Professor of Engineering

John Hayes, B.F.A., B.Eng., M.Eng., Ph.D.,  
Assistant Professor of Engineering

Thomas Mical, B.Des., M.Arch., M.S., Ph.D.,  
Assistant Professor of Architecture

Banu Ormeci, B.S., M.S., Ph.D.,  
Assistant Professor of Engineering

Trevor Pearce, B.Eng., M.Eng., Ph.D.,  
Associate Professor of Engineering

Alan Steele, B.Sc., Ph.D.,  
Associate Professor of Engineering

*Also assisting at Convocation:*

**Registrar's Office**

Suzanne Blanchard, B.Comm.  
University Registrar

Lindsay Ball  
Allison Baldwin, B.Sc.  
Elizabeth Carrier  
Jerrett Clark, B.A.  
Louise DeCristoforo  
Sue Dunsmore  
Dina Elatawi, B.A.  
Nancy Gleeson  
Dotty Nwakanma, B.A.  
Rebecca Hoskins, B.A.  
Carolyn Kibsey, B.A.  
Patricia Kenny  
Kelly Lauzon, B.Hum., M.A.  
Valentina Leon, B.A.  
Leslie Main  
Neil Macfadyen  
Ryan MacKay, B.A.  
Dean Mellway, B.A., M.S.W.  
Lisa Ralph  
Carolyn Richer, B.A.  
Judy Sakell, B.Comm.  
Ashlea Sharpe, B.A.  
Judith Srna, B.A.  
Monika St. Jean  
Erika Strathearn  
Chandra Stratton, B.A.  
Janis Taylor  
Lisa Tsotroudīs, B.A.  
Jeffrey Weiser

**Registrar's Office, Faculty of Graduate Studies and Research**

Linda Backer  
Assistant Dean/Registrar

Ann Bold  
Judy Bowman  
Carol Corkran  
Maureen Fagan  
Christina Farago  
Lee Hull, B.A.

**Office of the President**

Colleen A. LaPlante, C.M.P.  
Wanda Jackson

**University Communications**

Doug Wotherspoon  
Director, Communications and Community Relations

Ann Anderson, B.A.  
Roz Crawford  
Nanci Jolicoeur  
Rick Karayanis  
Lin Moody, B.J., M.A.  
Cindy Robinson, B.A., M.A.  
Chris Strangemore  
Margo Thomas

#### **University Ambassadors**

Laura Allen  
Brandon Bignell  
Julie Davis  
Jonathan Dawe  
Laura Dunbar  
Shari Eisen  
Melissa Extross  
Morgan Faulkner  
Benjie Garonce  
Shawn Gervais  
Chris Glazier  
Alexander Gurnham  
Jennifer Hallman  
Alyx Holden  
Gregory Hum  
Laurie Lim  
Michelle Martin  
Kaylee Mask  
Mark McHale  
Vanessa Rook  
Jill Thayer

We would also like to acknowledge the following on-campus departments and ancillary operations for their valuable contribution to the success of the Spring 2006 Convocation:

Aramark  
Alumni Services  
Archives  
Bookstore  
CUSERT  
Department of Recreation and Athletics  
Graphic Services  
Instructional Media Services  
Parking Services  
Physical Plant  
Senate Office  
University Safety





## Philip Lapp

**Philip Lapp, O.C., B.A.Sc., S.M., Sc.D.,  
Hon. LL.D., P.Eng., F.R.S.C.**

Philip Lapp, an aeronautical engineer and physicist, will be awarded the degree of Doctor of Engineering, *honoris causa*, at the 9:30 a.m. ceremony on Thursday, June 15, "in recognition of a distinguished career in the Canadian aerospace industry."

Philip Lapp's contributions to aeronautical, aerospace, and communications science and technology have played a very significant part in Canada's aerospace industry. He joined de Havilland Aircraft of Canada in the mid-1950s and more than a decade later co-founded Spar Aerospace, which developed and built the Canadarm used by the NASA Space Shuttle program. By the late 1960s, Mr. Lapp had established a successful consulting engineering business which, over the next 37 years, led assignments in such areas as guidance and inertial navigation, anti-aircraft missile defence, infrared detection and optical surveillance, space technology, remote sensing, surveying and mapping, engineering education and human resource planning. A former president of the Canadian Council of Professional Engineers, Mr. Lapp has helped forge links between industry and the academic world and to humanize the engineering profession by evaluating the impact of new designs on society.



## *Thursday, June 15, 9:30 a.m.*

Chancellor Marc Garneau, C.C., C.D., B.Sc., Ph.D., LL.D., P.Eng., presiding.

*(The audience is requested to stand when the Academic Procession arrives, to remain standing until 'O Canada' has been sung, and at the conclusion of the ceremony to remain until the Academic Procession has left.)*

### **Processional Music**

John Robert Coghill Jr., B.Mus. (bagpipes)

Garry Matthews (snare drum)

Craig Moffatt (bagpipes)

### **O Canada\***

*(the audience is invited to sing)*

### **Welcome by the Master of Ceremonies**

Alan Harrison, B.A., M.A., Ph.D.,

Provost and Vice-President (Academic)

### **Conferring of the Degree of Doctor of Engineering, *honoris causa*, upon**

Philip Lapp, O.C., B.A.Sc., S.M., Sc.D., Hon.LL.D., P.Eng., F.R.S.C.

(presented by Jonathan Beddoes, B.Eng., M.Eng., Ph.D., P.Eng., Professor of Engineering (Mechanical and Aerospace))

### **Convocation Address**

Philip Lapp

### **Conferring of Degrees by Examination**

### **Awarding of Medals**

### **Presentation of the HM Tory Award to**

Alex Smith Windsor

(presented by Shawn Menard, CUSA President, and

Ann Tierney, Associate Vice-President, Student and Academic Support Services)

### **Presentation of the Carleton University Students' Association Honour Award for Service to**

Michael Karakolis

(presented by Shawn Menard, CUSA President, and

Ann Tierney, Associate Vice-President, Student and Academic Support Services)

### **Carleton University Alumni Association Welcome**

Judy Moschuk, Edmonton Branch President, B.A./93

### **Recessional Music**

*\*see next page for wording*

*O Canada! Our home and native land!  
True patriot love in all thy sons command.  
With glowing hearts we see thee rise,  
The True North strong and free!  
From far and wide, O Canada,  
We stand on guard for thee.  
God keep our land glorious and free!  
O Canada, we stand on guard for thee.  
O Canada, we stand on guard for thee.*

*O Canada! Terre de nos aïeux,  
Ton front est ceint de fleurons glorieux.  
Car ton bras sait porter l'épée,  
Il sait porter la croix.  
Ton histoire est une épopée,  
Des plus brillants exploits.  
Et ta valeur, de foi trempée,  
Protégera nos foyers et nos droits.  
Protégera nos foyers et nos droits.*



### Henry Marshall Tory Award

Established in 1950 by the Students' Council of Carleton College, the H.M. Tory Award is presented annually to an outstanding graduating student who has combined excellence in academics with demonstrated leadership and broad participation in extracurricular activities at Carleton.

**Alex Smith-Windsor**, an Aerospace Engineering student, has been selected this year to receive the prestigious HM Tory Award. During his years at Carleton, Alex combined a high level of academic achievement with extensive involvement in programs and activities to benefit students. Alex has volunteered with the CUSA Foot Patrol Service, a program committed to the safety of the Carleton campus, and has received the "Male Patroller of the Year" award.

Previously, Alex has been the Vice-President of Academic Issues for the Carleton Student Engineering Society and this past school year was elected President of the Society. As President, he organized the Carleton delegation for the Ontario Engineering Competition at which Carleton won two first place and two second place medals in only six competitions. He has coordinated Carleton's involvement in National Engineering Week and has worked diligently to expand the services and events available for engineering students here at Carleton. He has represented his peers in student engineering associations at both the provincial and national level.

Alex's professors and fellow students have recommended him for this award noting he is a bright self-starter with an excellent sense of humour and a strong dedication to all aspects of student life at Carleton.



### Carleton University Students' Association Honour Award for Service

The Honour Awards for Service are presented annually to graduating students who have served the Carleton University community through their involvement in student government, student associations, athletics, or extracurricular activities for the benefit of all students.

**Michael Karakolis**, an Aerospace Engineering student, has been selected for a Carleton University Students' Association Honour Award for Service based on his outstanding academic achievement and his dedication to the Carleton community. His many contributions to student life at Carleton include service as Director of the Carleton University Student Emergency Response Team and service as a Residence Fellow.

## Doctor of Philosophy

*(presented by Professor John Shepherd,  
Associate Dean of the Faculty of  
Graduate Studies and Research)*

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

### Martin John Conlon

*B.Eng., M.Eng.*

Mechanical Engineering  
Potential Nonlinear Behaviour with  
VAD Use in Humans  
Supervisors: D. L. Russell and  
T. Mussivand

### Shaodong Wang\*

*B.Sc., M.Sc.*

Mechanical Engineering  
Simulation on the Welding Process of  
Low-Alloy Steel by Finite Element  
Method  
Supervisor: J.A. Goldak

### Abdulkareem Bala Adinoyi

*B.Eng., M.Sc.*

Electrical Engineering  
Multi-Antenna and Relaying  
Techniques in Wireless  
Communication Networks  
Supervisor: H. Yanikomeroglu

### Kayvan Mosharaf Ghahfarokhi\*

*B.Sc., M.Sc.*

Electrical Engineering  
Resource Management and Service  
Differentiation in WDM Networks  
Supervisors: J. Talim and  
I. Lambadaris

### Carlos Herman Rentel Gómez\*

*B.Eng., M.Sc.*

Electrical Engineering  
Network Time Synchronization and  
Code-Based Scheduling for Wireless  
Ad Hoc Networks  
Supervisor: T. Kunz

### Leili Shafai\*

*B.Sc., M.Sc.*

Electrical Engineering  
Novel Membrane-Backed Defected  
Ground Plane Transmission Line  
Phase Shifter  
Supervisors: A. Petosa and J. Wright

### Yiqun Helen Tang\*

*B.Eng., M.Eng.*

Electrical Engineering  
Fair Medium Access Control Scheme  
for Packet Ring Networks  
Supervisor: J. Lambadaris

### Xiaojing Tao

*B.Eng., M.App.Sc.*

Electrical Engineering  
Traffic Balancing: A Method for  
Exploiting System Capacity in  
Wireless Ad Hoc Networks  
Supervisors: D. Falconer and T. Kunz

### Haiying Zhu\*

*B.Eng., M.App.Sc.*

Electrical Engineering  
Scheduling Algorithms for OFDM  
Broadband Wireless Systems  
Supervisor: R. Hafez

## Master of Applied Science

*(presented by Professor John Shepherd,  
Associate Dean of the Faculty of  
Graduate Studies and Research)*

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

### Ryan James Beaubien

*B.Eng.*

Aerospace Engineering  
Improved Frequency Domain Flutter  
Analysis Using Computational Fluid  
Dynamics

### Gregory Lloyd Davis\*

*B.Eng.*

Aerospace Engineering  
Trailing Edge Flap Control of  
Dynamic Stall on Helicopter Rotor  
Blades

### Magali Francoise Duval\*

*B.Eng.*

Aerospace Engineering  
Investigation and Modelling of the  
Heat Transfer Process in Carbon  
Fibre/Epoxy Composite Tools



**Erin Diane Farbar\***

*B.Eng.*

Aerospace Engineering  
Experimental and Numerical Study  
of a Hydrogen Peroxide/Hydroxyl  
Terminated Polybutadiene Hybrid  
Rocket

**Michel Garcia**

*B.Eng.*

Aerospace Engineering  
Axially Grooved and Arterial Heat  
Pipe Testing and Numerical Analysis

**Samira Kazan\***

*B.Sc.*

Aerospace Engineering  
Measurement and Prediction of the  
Hemodynamic Effects of Passive Leg  
Elevation

**Travis Mikjaniec**

*B.Eng.*

Aerospace Engineering  
The Preliminary Design of the  
SHARCS Rotor Blade

**Marc-André Müller**

*B.Eng.*

Aerospace Engineering  
Design of an Active Fibre Composite  
Geometric Modal Sensor for Use in a  
Helicopter Rotor Blade

**Shane Storrington**

*B.Eng.*

Aerospace Engineering  
Design and Manufacturing of Loop  
Heat Pipes for Electronics Cooling

**Tatjana Zoric**

*B.Eng.*

Aerospace Engineering  
Experimental Investigation of  
Secondary Flows in a Family of Three  
Highly Loaded Low-Pressure Turbine  
Cascades

**Lorne Gordon Allaby**

*B.Eng.*

Mechanical Engineering  
Maximizing the Performance of Semi-  
Closed Oxygen/Carbon Dioxide Gas  
Turbine Combined Cycles for Power  
Generation

**Shane Brian Flynn**

*B.Eng.*

Mechanical Engineering  
Using Annealed Pyrolytic Graphite in  
Conduction Cooled Electronics  
Cooling Applications

**Timothy Lewis\***

*B.Eng.*

Mechanical Engineering  
T-Stress Solutions for Cracks at  
Notches and in Cylinders

**Wael Moustafa**

*B.Sc.*

Mechanical Engineering  
Consideration of the Effect of Vehicle  
Stability Augmentation Algorithm  
Failure Modes on Vehicle Behaviour

**Jackie Yu**

*B.Eng.*

Mechanical Engineering  
T-Stress Solutions of Cracks  
Emanating from Circular Holes

**Hazem Abdel-Maguid\***

*B.Sc.*

Electrical Engineering  
Analysis of Bang-Bang Clock and  
Data Recovery

**Giuseppe Agnello\***

*B.Eng.*

Electrical Engineering  
Parametric Mixing for Centralized  
VoIP Conferencing Using ITU-T  
Recommendation G.722.2

**Alexander Andreyuk**

*M.Sc.*

Electrical Engineering  
Optical Properties of a Five-Layer  
Slab With Long-Period Gratings

**Yingzhi Chen**

*B.Sc., M.Sc.*

Electrical Engineering  
Experimental Characterization of  
an Ultra-Wideband Indoor Wireless  
Channel

**Aditi Das**

*B.Tech.*

Electrical Engineering  
Non-Linear Thermal Modeling Using  
Neural Networks

**Ziad El-Khatib\***

*B.A.Sc.*

Electrical Engineering  
Fully-Integrated Fully-Differential  
Silicon RF CMOS Distributed  
Amplifier Based on Multi-Tanh  
Linearization Principle

**Celine Emmanuelle Marie Fletcher**

*B.Eng.*

Electrical Engineering  
Voltage Controlled Oscillator Phase  
Noise Reduction Technique

**Wenjie Huang**

*B.Eng.*

Electrical Engineering  
A 0.18 Micrometres CMOS Half-Rate  
Clock and Data Recovery Circuit with  
Reference-less Dual Loop

**Toqeer Ahmad Israr\***

*B.Eng.*

Electrical Engineering  
Transformation of UML 2.0 Models  
with Performance Annotations to Core  
Scenario Models

**Navdeep Kaur Kapoor\***

*B.Eng.*

Electrical Engineering  
Dynamic Matching of Independent  
Jobs on a Computing Grid

**Vincent Ibrahim Karam**

*B.Eng.*

Electrical Engineering  
A 5.8mW Fully Integrated Multi-  
Gigahertz Frequency Synthesizer in  
0.13-Micrometres CMOS

**Muhammad Ali Khan\***

*B.Eng.*

Electrical Engineering  
Latch-Based Decimation FIR Filters

**Wael Akram Hanafy Mahmoud**

*B.Eng.*

Electrical Engineering  
Overlap-Save Receivers for Advanced  
DS-CDMA Wireless Systems

**Masoud Mashhour\***

*B.Sc.*

Electrical Engineering  
Broadband Point-to-Point Wireless  
Channels Over Flat Land with Low  
Antennas

**Daniel Joseph Olszewski\***

*B.Eng.*

Electrical Engineering  
Tunable Filter and Receive Signal  
Strength Indicator for Detecting  
Whitespace in the Frequency  
Spectrum

**Karen Anne Rideout**

*B.Sc.*

Electrical Engineering  
Adverse Medical Event Reduction  
Technologies Identification of  
Primary Risk Factors of Adverse  
Medical Events Using Artificial  
Neural Networks

**Fiona Jennifer Grace Shearer\***

*B.Eng.*

Electrical Engineering  
CMOS Analog Cubing Circuits for  
Radio-Over-Fiber Predistortion

**Andrew Thoe Yee Soon**

*B.Eng.*

Electrical Engineering  
Multi-Resolution Modeling for  
Extremely High Resolution 3D  
Scanned Faces

**Xiaoguang Wang\***

*B.Eng.*

Electrical Engineering  
Robust Control for Bilateral  
Teleoperators with Soft Environments

**Mark William Wyville\***

*B.Eng.*

Electrical Engineering  
Dielectric Resonator Antenna Arrays  
in the EHF Band

**Wei Yu Zheng**

*B.Eng., M.Eng.*

Electrical Engineering  
Modeling for Haptics-Based Surgical  
Simulation

## Master of Engineering

*(presented by Professor John Shepherd,  
Associate Dean of the Faculty of  
Graduate Studies and Research)*

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**Matthew D.G. Cross**

*B.Eng.*

Aerospace

**Jeffrey T. Wilkins**

*B.Eng.*

Aerospace

**Anne Euchler\***

*Dip.*

Mechanical

**Martin Euchler\***

*Dip.*

Mechanical

**Amandeep Singh Sandha\***

*B.Eng.*

Mechanical

**Hui Wang**

*B.Eng.*

Mechanical

**Shawn David Nicholl\***

*B.Eng.*

Electrical

**Richard A. Alam**

*B.Eng., B.Sc.*

Telecommunications Technology  
Management  
Open Source Software Projects,  
Market Offers, and Competitive  
Advantage

**Michael Ghobros\***

*B.Sc.*

Telecommunications Technology  
Management  
The Relationship Between Capability  
Platform and Performance for  
Software Startups

**Scott John Miller**

*B.Eng.*

Telecommunications Technology  
Management  
Software Product Architectural  
Integrity During Organizational  
Distress

**Piedad Bibiana Pinzon**

*B.Sc.*

Telecommunications Technology  
Management  
The Relationship Between Structure  
and Performance of Open Source  
Projects: Case of Learning Content  
Management Systems

**Rizwan Ur Rehman**

*B.Sc., M.B.A.*

Telecommunications Technology  
Management  
Factors That Contribute to Open  
Source Software Project Success

**Jihong Yang\***

*B.Sc.*

Telecommunications Technology  
Management  
Sales Generated Using Open Source  
Software Projects

## Bachelor of Engineering

*(presented by Professor Samy A.  
Mahmoud, Dean of the Faculty of  
Engineering and Design)*

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

**AEROSPACE**

**Nasr Elwaleed Ali\***

**Hajer Mahmoud Awatta**  
Co-operative Education  
*with distinction*

**Michael Bach**

**Nicholas Raymond Bourgeois**  
Co-operative Education  
*with high distinction*

**Courtney Bridgewater**  
*with distinction*

**Luc Brunet**

Co-operative Education  
*with high distinction*

**Jason Bryans\***

*with distinction*

**Jocque Romain Butler**

Minor in Business  
Co-operative Education  
*with distinction*

**Sébastien P. Cayouette**

**Victor Chu**

Co-operative Education  
*with distinction*

**Zachary R. Cimon**

**Mark Albert Coulombe**

**Rebecca Elise Cromwell**

**Barima Kwame Dankwa**  
Minor in Business  
Co-operative Education  
*with high distinction*

**Brian Christopher Darvell**

**Jonathon Dilworth**  
Co-operative Education  
*with distinction*

**Andrew Arthur Dobson**

**Stephen Finlay**  
Co-operative Education  
*with distinction*

**Kent Fowlie**  
Co-operative Education

**Christian Dominique Gagnon**  
Co-operative Education  
*with high distinction*

**David Galway**  
*with high distinction*

**Garin Helmut Gaudet**  
*with high distinction*

**Jessica Lynne Godin\***

**Leor David Grebler\***

**James Griffiths**  
*with distinction*

**Lisa Andrea Hibbert**  
Co-operative Education

**Jae Ryung Hong**

**Kerry Stephen Hutton**

**Peter Willi Jansen**  
*with high distinction*

**Michael Muron Karakolis**  
Co-operative Education  
*with high distinction*

**Belay Zeleke Kebede**  
Co-operative Education  
*with distinction*

**Sarfraz Ahmed Khan**  
Minor in Spanish

**Alireza Khani**

**Piotr Joseph Klimas**

**Ryan Michael Kozlowski\***

**Jeffrey George Kresan\***  
Minor in Business

**Ryan Thomas Leonard**

**Wayne Y. Leung**  
Co-operative Education

**Stian Lillehovde**

**Hung-Chieh Lin**

**Aaron Loiselle**  
Co-operative Education  
*with high distinction*

**Brian Kennedy Lynch**  
*with distinction*

**Dennis Steven Mandac**

**Nathan John Maron**  
*with distinction*

**Charles Guillaume Maxwell**

**Brian James McAninch\***  
*with distinction*

**Brett Fraser McKnight\***  
*with distinction*

**Sean McTavish**  
Co-operative Education  
*with high distinction*

**Craig Gordon Merrett**  
Minor in Mathematics  
*with high distinction*

**Qays Nazarali**  
Minor in Business  
*with high distinction*

**Harun Oria**  
*with distinction*

**Crystal Anne Orlaw**

**Joel John Louis Ouellette\***

**Patrick Byron Perrier**  
Co-operative Education  
*with distinction*

**Robert Andreas Petermann\***

**Nicolas Christophe Pignol**

**Alexandre Schmid**

**Allen G. C. Seto**  
Co-operative Education  
*with distinction*

**Christopher Michael Short**  
*with high distinction*

**Maria Short**  
*with high distinction*

**Kenneth Gordon Shouldice**  
Co-operative Education

**Bradley William Smith**

**Alex Smith-Windsor**  
*with high distinction*

**James Min-Soo Song**

**Nicholas Yung Wu Suen\***

**Mark Adam Swartz**  
Co-operative Education  
*with high distinction*

**Jéan-François Thibault**

**Daniel Robert Thompson**  
Co-operative Education  
*with distinction*

**Trevor Robert Kelly Vienneau**

**Matthew Richard Wells**  
Minor in Business  
Co-operative Education  
*with distinction*

**Jared Steven Wright**

**Edwin Patrick Yost**

**Benjamin Daniel Youé**

**Cavan Theo van Ulft\***

**ELECTRICAL**

**Ali Al-Farhan**

**Bismark Ampofo\***  
*with distinction*

**Farrukh Anis**

**Roby G. Ayres**

**Husnaini Azmy**

**Mehrdad Bafekr\***

**Daniel John Bradley\***



Colin Chan	Elizabeth Dorothy Iglesias Co-operative Education <i>with high distinction</i>	Suthakaran Navaratnam
Maimuna Fatimah Chawla <i>with high distinction</i>	Ali Syed Jafri	Theresa Nguyen <i>with high distinction</i>
Mervah Chawla <i>with high distinction</i>	Dan Jiang Minor in Statistics <i>with distinction</i>	Kwesi Nkansah*
John Clarke	Xiaofeng Jiang	Farah Nazli Omar
Salvatore DeMarco	Yan Jin <i>with high distinction</i>	Jordan Johnathan Parsons*
Nhan Do <i>with distinction</i>	Daniel Joyce	Piragalathan Pathmasenan Co-operative Education <i>with distinction</i>
Thuan Van Do <i>with distinction</i>	Dhanasuthan Kaneshapillai Co-operative Education <i>with distinction</i>	Pavel S. Peev <i>with high distinction</i>
Robin Kristy Durnford Co-operative Education <i>with distinction</i>	Yevgeniy Katz	Jason Ronald Prince
Pascal Gabriel Durocher*	Tariq Barakat Khader*	Lee Ming Quach
Mohamed Ahmed Elbadawi*	Kelly Katharina Kinahan Co-operative Education <i>with high distinction</i>	Sikdar Taposh Rahman
Michael Frank William Ellis*	Darryl Kostka <i>with distinction</i>	Vaseekaran Ramanathan
Lado Filipovic Co-operative Education <i>with high distinction</i>	Huyen Le Co-operative Education <i>with high distinction</i>	Ahilan Ratnathurai
John Gavin Franklyne*	Jack Yu Cheng Lee	Andrew C. W. Robinson*
Christopher Daniel Fridgen Minor in Business <i>with high distinction</i>	Grace Shiouming Lo Co-operative Education <i>with high distinction</i>	Andrew Ralph Rowden <i>with high distinction</i>
Purnima Rameshwar Goge Co-operative Education <i>with distinction</i>	David Cang Trung Luong <i>with distinction</i>	Angela Marie Rowe Co-operative Education <i>with high distinction</i>
Satheejan Gugananthan	Julian Mack	Ting Ruan
Jeremy Michael Gurski* <i>with distinction</i>	Lisa Catherine Meitin <i>with high distinction</i>	Ana Maria Salazar
Nagash Mohamed Hagos*	Patricia A. Mermuys Co-operative Education <i>with distinction</i>	Abubaker Mahdi Ali Salem
Abdallah Hamdan Minor in Business	Frank James Mouawad	Martin Savard
Ibrahim Thanana Eldin Hamdy*	Imran Muhammad	Peter Siyamalan Soundararajan
Kristoffer Mark Hammel <i>with distinction</i>	Manmit Muker Co-operative Education <i>with high distinction</i>	Prabaharan Supiramaniam
William Gordon Hudson		Nikki Morgan Sutherland
Man Hong Hy <i>with distinction</i>		Piotr Jacek Sysak
		Aviviere Telang Minor in Business <i>with high distinction</i>
		Jeffrey Territo Co-operative Education <i>with distinction</i>



- Abiramy Thiagarajah**
- Guy Michael Ridout Thomas**
- Lawrence Tong**
- Anh Toan Tran**  
*with distinction*
- James F. Wallwork\***
- Hsi-Cheng Don Wei**
- James Anthony Yaziji\***  
*with distinction*
- Amy Elisabeth Yee**
- Anna Zaki**
- MECHANICAL**
- Aleem Hiba-Tul Ahmed**
- Abeer Al-Azzawi**  
*with high distinction*
- Tanner Glen Ball**
- Jonathan Patrick Bayne\***
- Franchino Bonanno\***  
Concentration in Computer-Integrated Manufacturing  
Minor in Mathematics
- Travis Lee Brown**  
Concentration in Computer-Integrated Manufacturing  
Minor in Mathematics
- Thomas Michael Bukacek**
- Jason Dylan Chahal**
- Derrick Chan\***  
Concentration in Computer-Integrated Manufacturing
- Kenny Chau\***  
Concentration in Computer-Integrated Manufacturing  
Minor in Mathematics  
*with distinction*
- Brian Chiu\***
- Adam Coderre**  
Co-operative Education  
*with high distinction*
- Ian Currie Creelman\***
- Nicholas Frederick De Salvo\***
- Steven Deslandes**  
Co-operative Education  
*with distinction*
- Josee Dubosq**
- Kyle G. Eckhardt**
- Bouria Mohammad M. R. Faqihi**  
*with distinction*
- Kevin Fennell**
- Kathleen Frances Forestell**
- Brigid Gillis**
- Noah Goddard\***
- Kristina Michelle Haase\***
- Joshua Hale**  
Co-operative Education  
*with high distinction*
- M. A. Ziaul Haque\***  
*with high distinction*
- Douglas Hart**  
*with distinction*
- Gültekin Samil Hazer\***  
Concentration in Computer-Integrated Manufacturing  
Co-operative Education  
*with distinction*
- Thomas Henhoeffter**  
*with high distinction*
- Jason Hickey**  
Co-operative Education  
*with high distinction*
- Jack Jensen**  
*with distinction*
- Nathaniel Bernard Juneau**  
Co-operative Education  
*with high distinction*
- Balakanthan Kanagasabai\***  
Concentration in Computer-Integrated Manufacturing
- Samit Kapoor\***  
Co-operative Education  
*with distinction*
- Ozma Atta Khan**
- Sangtae Kim\***  
Concentration in Computer-Integrated Manufacturing  
*with distinction*
- Luke Anthony Klostranec**
- Sylvester Kuma**  
Concentration in Computer-Integrated Manufacturing
- Mark Christopher Léger**
- Melany Lepage\***
- Robert Allan Little**  
*with high distinction*
- Christopher Douglas MacGillivray\***
- Adam L. Machado**  
Concentration in Computer-Integrated Manufacturing  
Minor in Economics  
*with distinction*
- Andrei Paul Mariciuc**
- Patrick Marmillod**  
Co-operative Education  
*with distinction*
- Thomas Corey McRobbie**  
*with high distinction*
- Steven Jarek Mogridge**
- Jonathan Optis**  
*with distinction*
- Monika Rostkowska**
- Rene Sabourin**
- Thomas Savard\***  
Minor in Economics
- Mark Stinson\***
- Eva Driscoll Szabo**  
Minor in Mathematics  
*with high distinction*
- Michael Tan\***
- Ivan Ting**
- Paul Trisolini**
- Nazim Ulusoy**  
Concentration in Computer-Integrated Manufacturing

James Wanless\*

Patrick Nigel Wiles

Sebastian Wszolek

Roger Lok Chi Yau  
Minor in Economics  
*with distinction*

M. Nader Zaheer\*  
Concentration in Computer-  
Integrated Manufacturing

Hui Zhou\*  
Concentration in Computer-  
Integrated Manufacturing  
*with distinction*

### Bachelor of Industrial Design

(presented by Associate Professor  
Lois Frankel, Director of the School of  
Industrial Design)

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

Christiane Aitken\*  
*with distinction*

Marta Antoszkiewicz  
Minor in Business  
*with high distinction*

Soo Ryun Baik

Nikolas Beaudin  
*with high distinction*

Robert John Beland  
Minor in Psychology  
*with distinction*

Ilana Ben-Ari  
*with distinction*

Stacey Ellen Black  
Co-operative Education  
*with high distinction*

Adib Dagher  
Minor in Psychology  
*with distinction*

Barbara Dora Di Bacco  
*with high distinction*

Jenna Kate Drupsteen

Samnang Eav  
Minor in Art History

Christopher Lyle Edwards  
*with distinction*

Roy Eng\*  
*with distinction*

Aldus Ho Lam Fong  
Minor in Business  
*with high distinction*

Benjamin Michael Harrison\*  
*with high distinction*

Bianca Jade Leigh  
*with distinction*

Pollyanna Ling  
*with distinction*

Yvonna Joanna Malyk  
Minor in German  
*with distinction*

Elizabeth C. Mitchell  
Minor in Business  
*with high distinction*

Kong Joo Moon  
Minor in Psychology

Grace Poon

Michelle Sarah Rousselle

Lindsey Segsworth  
*with distinction*

Amy Chau Ying Tong  
Minor in Psychology

Dawn Elizabeth Wintour

Danielle Wojtyniak  
*with high distinction*

Christopher Wong  
*with high distinction*

Randy Yang  
*with high distinction*

Kevin James Yip

Kristina K. Yovcheva

Alvin Gar Wah Yung  
B.Sc.  
*with distinction*



# Medallists in the Graduating Class

## University Medals (Undergraduate)

Awarded annually, when merited, to the graduating students standing highest in architecture, architectural studies, arts, commerce, computer science, engineering, humanities, industrial design, interfaculty studies, international business, journalism, mathematics, music, public administration, public affairs and policy management, science, and social work.

University Medal in Industrial Design  
**Elizabeth C. Mitchell**  
*Bachelor of Industrial Design*  
*with high distinction*

## Senate Medals

Awarded, when merited, to graduating students of outstanding academic achievement.

## Doctoral Level

**Kayvan Mosharaf Ghahfarokhi**  
*Doctor of Philosophy*  
*Electrical Engineering*

## Master's Level

**Fiona Jennifer Grace Shearer**  
*Master of Applied Science*  
*Electrical Engineering*

## Undergraduate Level

### Bachelor of Engineering (Aerospace)

**Luc Brunet**  
*with high distinction*

**Peter Willi Jansen**  
*with high distinction*

**Sean McTavish**  
*with high distinction*

**Craig Gordon Merrett**  
*with high distinction*

### Bachelor of Engineering (Electrical)

**Maimuna Fatimah Chawla**  
*with high distinction*

**Lado Filipovic**  
*with high distinction*

**Christopher Daniel Fridgen**  
*with high distinction*

**Elizabeth Dorothy Iglesias**  
*with high distinction*

**Manmit Muker**  
*with high distinction*



**Andrew Ralph Rowden**  
*with high distinction*

**Aviviere Telang**  
*with high distinction*

**Bachelor of Engineering (Mechanical)**

**Robert Allan Little**  
*with high distinction*

**Eva Driscoll Szabo**  
*with high distinction*



## **Monique Aubry Frize**

**Monique Aubry Frize, O.C., B.A.Sc.(EE),  
P. Eng., M. Phil., D.I.C., M.B.A., Doctorate,  
D.U., D.Sc., D.Eng., F.C.A.E., D.HumL.**

As President of the International Network of Women Engineers and Scientists (INWES), Dr. Monique Aubry Frize has worked tirelessly to encourage young women to choose a career in science and engineering. In 1997, Dr. Frize joined Carleton University as a Professor in the Department of Systems and Computer Engineering and the University of Ottawa as a Professor in the School of Information Technology after working as a clinical engineer for 18 years. Dr. Frize held the NSERC/Nortel Chair for women in science and engineering in Ontario between 1997 and 2002. She was the first woman to graduate with an engineering degree at the University of Ottawa. She completed an M.Phil. at Imperial College in London, England, followed by an M.B.A. at Université de Moncton, and a doctorate at Erasmus Universiteit.

In 1989, Dr. Frize was appointed the first holder of the Nortel-NSERC Women in Engineering Chair at the University of New Brunswick (Fredericton), a position that covered the entire country. Among her many achievements, she has been awarded several honorary degrees and was inducted as a Fellow of the Canadian Academy of Engineering and as an Officer of the Order of Canada. In 2000, Dr. Frize received the Women of Distinction Award for the National Capital Region presented by YMCA-YWCA of Ottawa/Carleton. She is a Visiting Professor at Coventry University and an Affiliated Scientist at the Ottawa Hospital Research Institute. She is married to Peter Frize and they have a son, Patrick Nicholas.

## *Thursday, June 15, 2:00 p.m.*

**Chancellor Marc Garneau, C.C., C.D., B.Sc., Ph.D., LL.D., P.Eng., presiding.**

*(The audience is requested to stand when the Academic Procession arrives, to remain standing until 'O Canada' has been sung, and at the conclusion of the ceremony to remain until the Academic Procession has left.)*

**Processional Music**

John Robert Coghill Jr., B.Mus. (bagpipes)

Garry Matthews (snare drum)

Craig Moffatt (bagpipes)

**O Canada\***

*(the audience is invited to sing)*

**Welcome by the Master of Ceremonies**

Alan Harrison, B.A., M.A., Ph.D., Provost and Vice-President (Academic)

**Convocation Address**

Monique Aubry Frize, O.C., B.A.Sc.(EE), P.Eng., M.Phil., D.I.C., M.B.A.,

Doctorate, D.U., D.Sc., D.Eng., F.C.A.E., D.HumL.

**Conferring of Degrees by Examination**

**Awarding of Medals**

**Presentation of the Carleton University Students' Association Honour Award for Service to Ahmad Rasem**

(presented by Shawn Menard, CUSA President, and

Ann Tierney, Associate Vice-President, Student and Academic Support Services)

**Carleton University Alumni Association Welcome**

Rosanne Howes, Architecture Chapter President, B.Arch./80, M.Arch.

**Recessional Music**

*\*see next page for wording*

*O Canada! Our home and native land!  
True patriot love in all thy sons command.  
With glowing hearts we see thee rise,  
The True North strong and free!  
From far and wide, O Canada,  
We stand on guard for thee.  
God keep our land glorious and free!  
O Canada, we stand on guard for thee.  
O Canada, we stand on guard for thee.*

*O Canada! Terre de nos aïeux,  
Ton front est ceint de fleurons glorieux.  
Car ton bras sait porter l'épée,  
Il sait porter la croix.  
Ton histoire est une épopée,  
Des plus brillants exploits.  
Et ta valeur, de foi trempée,  
Protégera nos foyers et nos droits.  
Protégera nos foyers et nos droits.*





**Carleton University Students' Association Honour Award for Service**

The Honour Awards for Service are presented annually to graduating students who have served the Carleton University community through their involvement in student government, student associations, athletics, or extracurricular activities for the benefit of all students.

**Ahmad Rasem**, a Communications Engineering student, has been selected for a Carleton University Students' Association Honour Award for Service based on his outstanding academic achievements and his contributions to the Faculty of Engineering. Ahmad is actively involved with the Institute of Electrical and Electronics Engineers, has represented the Faculty of Engineering in engineering competitions, and has served as a Nortel Campus Ambassador.

## Doctor of Philosophy

*(presented by Professor John Shepherd,  
Associate Dean of the Faculty of  
Graduate Studies and Research)*

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

### Rashed Alkaabi

*B.Sc., M.Eng.*

Civil Engineering  
Development of a Framework for  
Resource Planning and Allocation in  
Service Organizations  
Supervisors: S. Mahmoud and  
A.O. Abd El Halim

### Md. Akhtar Hossain

*B.Sc., M.Eng.*

Civil Engineering  
Modelling Shared Vehicle System  
Design and Operation Using Discrete-  
Event Simulation Technique  
Supervisor: A. Khan

### Xiaolin Qin\*

*B.Eng., M.Sc., Ph.D.Sc.*

Civil Engineering  
Real-Time Control and Optimization  
of Traffic Signal Timing Transition for  
Emergency Vehicle Preemption  
Supervisor: A. M. Khan

### Hongpo Xu\*

*B.Eng., M.Eng.*

Civil Engineering  
Application of Artificial Neural  
Networks in Vibration-Based Damage  
Identification  
Supervisor: J. Humar

### Ehab Zalok

*B.Sc., M.Sc.*

Civil Engineering  
Design Fires for Commercial Premises  
Supervisor: G. Hadjisophocleous

### Hamid Reza Salsali

*B.Sc., M.Sc.*

Environmental Engineering  
Producing Enhanced Quality  
Biosolids Through Anaerobic Digester  
Optimization  
Supervisor: W. Parker

### Balasubramaniam Shanchayan

*B.Sc.Eng., M.Eng.*

Environmental Engineering  
Dynamic Analysis of a Biofilter  
Treating Atad Off Gases and Dynamic  
Model Development  
Supervisor: W. Parker

## Master of Applied Science

*(presented by Professor John Shepherd,  
Associate Dean of the Faculty of  
Graduate Studies and Research)*

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

### Khalid Alnasser\*

*B.Sc.*

Civil Engineering  
Mathematical Investigation of Heat  
Transfer in Industrial Crude Oil Tank  
During a Fire

### Haoze Deng

*B.Eng.*

Civil Engineering  
A Simplified Method for Nonlinear  
Cyclic Analysis of Reinforced  
Concrete Structures: Direct and  
Energy Based Formulations

### Eman Elsayed Elewini\*

*B.Eng.*

Civil Engineering  
Performance of Gypsum Board  
Exposed to Fire

### Yu Kang\*

*B.Eng.*

Civil Engineering  
Reduction in Fire Resistance of Steel  
Beams Caused by Partial Fire  
Protection Loss

### Yoon Jeoung Ko\*

*B.Sc.*

Civil Engineering  
CFD Study of Balcony Spill Plumes:  
Focused on the Balcony Area

### Shahab Mehregani

*B.Sc.*

Civil Engineering  
Seismic Stability Analysis of  
Liquefiable Earthdams

**Khashayar Refahi\***

*B.Sc.*

Civil Engineering  
Seismic Stability and Deformation of  
Waba Dam

**Ramy Hussein A. Soliman El-Basha**

*B.Eng.*

Civil Engineering  
Driver Speed Behaviour on Freeway  
Deceleration Speed-Change Lanes

**Jennifer Anne Stephenson\***

*B.Eng., Dip.*

Civil Engineering  
Evaluation of Using Uniform Hazard  
Spectra for Seismic Design of  
Canadian Highway Bridges

**Ruogang Zhao\***

*B.Eng.*

Civil Engineering  
A Study on Slotted Square and  
Rectangular Hollow Structural  
Section Connections

**Brian J. Henderson\***

*B.A., B.Eng.*

Environmental Engineering  
Impacts of Aggregate Quarry  
Dewatering on Groundwater  
Management in Ontario

### Master of Engineering

*(presented by Professor John Shepherd,  
Associate Dean of the Faculty of  
Graduate Studies and Research)*

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

**Jihad Boutros Aoun\***

*B.Appl.Sc.*

Civil

**Maqsooda Bibi**

*B.Sc.*

Civil

**Maged M. Elmadhoon\***

*B.Sc.*

Civil

**Ahsan Tariq\***

*B.Sc.*

Civil

**Ganga Dhar Tripathi**

*B.Eng.*

Civil

**Bradley Murray Carew**

*B.Sc.*

Environmental

**Quanchang Fei\***

*B.Eng.*

Environmental

**Andrew Mark Harwood\***

*B.Eng.*

Environmental

**Jie Shen**

*B.Eng.*

Environmental

### Master of Architecture

*(presented by Professor John Shepherd,  
Associate Dean of the Faculty of  
Graduate Studies and Research)*

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

**Oudsia Aziz**

*B.Arch.*

Architectural Transformation of  
Heritage Buildings Case Study: Folk  
Art Museum Building Sonargaon,  
Bangladesh

**Dariusz Jakub Boron**

*B.Arch.St.*

Infinite Regress: The Blurring of an  
Architectural Game-Space

**Ching Shan Alla Cheung\***

*B.Arch.*

Sonic Architecture: A Modulator of  
Sound and Space - National Gallery of  
Sound Art

**Thomas C. J. Davis\***

*B.Arch.St.*

Sustaining Technology:  
Questioning the Role of Efficiency  
in Environmentally-Sustainable  
Architecture

**Karam George Georges**

*B.Arch.St., Dip.*

A Light Railway Station for the City of  
Ottawa An Urban Gateway

**Ryan M. Koolwine**

*B.Arch.St.*

Suburban > (Spec-u-la-tion)

**Christina Gar Yee Lee\***

*B.Arch.Sc.*

Catching the Breeze: Ventilation  
Studies as the Generator of Form

**Dinko Sakanovic\***

*B.Arch.St.*

[Re]visiting the Orphanage

**Rachel Sin\***

*B.Arch.Sc.*

Defining Canadian Identity in the  
National Cemetery of Canada

**Man Yi Tsang**

*B.Arch.St.*

The Wisdom of Balance: Revealing  
Taoist Principles Through  
Architecture

**Trevor Andrew Wallace**

*B.Arch.St.*

Interrupting the Artefact: The  
Reorientation of the Royal Canadian  
Yacht Club

### Bachelor of Engineering

*Professor John Chinneck, Associate  
Dean (Research) of the Faculty of  
Engineering and Design*

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

### CIVIL

**Stephen Richard Arends**

Concentration in Management

**Alain-Philippe Beauger\***

Concentration in Management  
*with high distinction*

**Richard Cornelis Bongers**

**Simon Branch\***

Concentration in Management

**Christopher Cogliati**

**Khalil Dabat\***

Concentration in Management



Joshua Sterline Day  
Concentration in Management

Ifeyinwa Hilda Esedebe  
Concentration in Management  
*with high distinction*

Remo Gentile\*  
Concentration in Management  
Co-operative Education  
*with distinction*

Christian Glorieux  
Concentration in Management

Liang Jun Gong\*

Jeremy Alexander Green  
Concentration in Management

Thomas Gryz  
*with high distinction*

Anastasia Emily Helliker  
*with high distinction*

Tumelo Keitumetse\*  
Minor in Statistics

Mringi Emmanuel Joseph Kitaly\*

Jie Lao  
Minor in Mathematics  
*with high distinction*

Sherif Mahmoud Osama A. Mahmoud\*

Alexander Robert McAuley  
*with distinction*

Jeffrey Asher McRae  
*with high distinction*

Thomas G. Miller  
*with distinction*

Douglas Christopher Myles

Mark Onaba\*  
Concentration in Management

Michael John Pearson  
*with high distinction*

Jean-Pierre Perron  
*with high distinction*

Andrew Michael Pulsifer\*  
Concentration in Management

Alessandro Mauro Qualizza  
Concentration in Management

Obokeng Rabai

Farshad Safiardestani\*

Justin Swan\*  
Concentration in Management  
*with distinction*

Craig Steven Wadsworth  
*with distinction*

#### COMMUNICATIONS

Abdullah Al Dalati  
Co-operative Education  
*with distinction*

Nasser Ahmed Al-Salami

Ammar Z. AlBetar  
Co-operative Education  
*with distinction*

James Craig Ball

James A. C. Bruce\*

Hossein Mohamad Chahrour  
Minor in Mathematics

Chao Chen

Sajeeth Cherian  
Co-operative Education  
*with high distinction*

Kyle Dixon  
*with distinction*

James Richard Ewert

Nicolas Gravel

Nicholas Anthony Gysbers  
Co-operative Education  
*with distinction*

Qi Hu  
Minor in Psychology  
*with distinction*

Raymond A. Janisse

Amro Amer Kabbara

Shaun Keay

Kabo Kgwarae  
Minor in Economics  
*with high distinction*

Ashima Kudaisya  
Co-operative Education  
*with high distinction*

Thabo Lesole

Tao Ma

Megha Malhotra  
Co-operative Education  
*with high distinction*

Simon Masike

Rohan Ramachandra Mutagi

Tebatso Nage  
Minor in Economics  
*with high distinction*

Ilian Nikolov

Ricky Paudyn

Jeremy Phan  
Minor in Economics

Ahmad Rasem  
Co-operative Education  
*with high distinction*

Soroush Salehian  
Co-operative Education  
*with distinction*

Hafeez Ahmed Shaikh

Dravya Sharma  
Co-operative Education  
*with high distinction*

Natasha Tajik  
Minor in Mathematics

Peyman Talebi Fard  
*with high distinction*

Sahba Talebi Fard  
*with high distinction*

Sarah Anne Taylor-Falcioni  
Co-operative Education  
*with high distinction*

Sangetha Thadchanamoorthy

Lei Yu

Jiesheng Zhu  
*with distinction*



## COMPUTER SYSTEMS

**Jonathan Abrams**  
*with distinction*

**William Lloyd Atkinson**  
Co-operative Education  
*with high distinction*

**Patel Barwabatsile**

**Allan Beharry**  
Co-operative Education  
*with high distinction*

**Benjamin Biron**  
Co-operative Education  
*with high distinction*

**Kirill Bocharnikov**  
*with distinction*

**Eric Boyer**  
*with high distinction*

**David Bretzlaff**  
Co-operative Education  
*with distinction*

**Randall Douglas Cameron**  
*with high distinction*

**Derek Cy Bill Chan**  
*with distinction*

**Eric Cy Hung Chan\***  
*with distinction*

**Partheeban Chandrasekaran**  
*with distinction*

**Wen Chan Chang**  
Minor in Business  
Co-operative Education  
*with distinction*

**Sankua Chao**  
Co-operative Education  
*with high distinction*

**Christopher Lawrence Choquette**  
*with distinction*

**Alex Nathan Chouinard**  
*with distinction*

**David Alexander Cummings**  
Co-operative Education  
*with high distinction*

**Abes Dabir**  
Co-operative Education  
*with high distinction*

**Saqib Dareshani**

**Alqadir Dhalla**  
Minor in Business

**Nadeem Douba**

**Jeffrey Adam Andrew Dugal**

**Poopalasingham Elankeswaran**  
Co-operative Education  
*with distinction*

**James Ellwood**

**Scott Michael Filip**

**Matz Nikolas Finckenstein**

**Michael Floyd**  
Co-operative Education  
*with high distinction*

**Bradley Ford**

**Andrew Brian Fox**  
Co-operative Education  
*with high distinction*

**Kambiz Frounchi**  
*with high distinction*

**Derek R. Ghosh**

**Ross Steven Green**  
*with high distinction*

**Tajwant Singh Hans**

**Belal Hussain**  
Co-operative Education  
*with distinction*

**Jawid Ibrahim**

**Andrew J. H. Joe\***

**Shadya Shaikh Kabir**

**Mark Johannes Kallio**

**Christopher Morgan King**  
Co-operative Education  
*with high distinction*

**Ming Lee**  
Co-operative Education  
*with high distinction*

**Kok Hang Steven Leon-Tang**  
Co-operative Education  
*with high distinction*

**Jianning Liu**  
*with distinction*

**Stephen James Anthony Lombardi**

**Jamie Robert Longmuir**  
Co-operative Education  
*with high distinction*

**Stephen Lounsbury**  
Co-operative Education  
*with high distinction*

**Chien Wei Lu**

**Andrew Patrick Lyn**  
Co-operative Education  
*with high distinction*

**Sanjeeve Manickam**

**Jason Marling**  
Co-operative Education  
*with high distinction*

**Colin McCune**

**Maryam Mehdizadeh**  
*with distinction*

**Jason Miller**  
Co-operative Education  
*with high distinction*

**Said Mohamed\***

**Ali Monadi**  
Co-operative Education  
*with distinction*

**Tumediso Mphato**

**Jeevithan Muttulingam**  
Co-operative Education  
*with high distinction*

**Anna Nguyen**  
Co-operative Education  
*with high distinction*

**Khac Tien Nguyen**

**Preetham Vishnu Nosum**

**Kesi-Oluwa Kolawole Olafimihan**  
Minor in Economics

Godiraone Pone  
Minor in Economics

Andrew N. Ravindran  
Minor in Business  
*with high distinction*

Aheed Ravji

Eric Richer Laflèche  
*with distinction*

Ben Jesse Russill

Nishanth Santhinathan

Pierre-Olivier Savoie

Thaaraha Selvarajah  
Minor in Mathematics

Kashif Shah

Tharini Shanmuganathar  
Minor in Statistics

Vasuki Shanmuganathar  
Minor in Statistics

Maria Simsky  
*with high distinction*

Ethan Patrick William Sturrus

Mayuran Subramaniam  
Co-operative Education  
*with high distinction*

Vakeesan Suntharaganeshamoor

Soumeya Tarfi\*

Percy Thozamile Thaba

Gayathiri Tharmakulasingam  
*with high distinction*

Benjamin David Tiessen  
Co-operative Education  
*with distinction*

Thomas Christian Von Moos  
Co-operative Education  
*with high distinction*

Daniel David Webster\*

Liang Xu  
*with distinction*

I Hsien Yeh

Jing Mei Zhang

Xi Zhao  
Co-operative Education  
*with high distinction*

ENGINEERING PHYSICS

Veljko Bajagic

Lindsay Anne Beaton  
Co-operative Education  
*with distinction*

Marcin Bienasz  
*with distinction*

Wayne Bonnet  
*with high distinction*

David James Farquharson

Norman R. Fong  
*with high distinction*

Ryan Hunter Griffin  
Co-operative Education  
*with high distinction*

Alexei Ivanov  
Co-operative Education  
*with high distinction*

David Thomas Jack  
Co-operative Education  
*with high distinction*

Scott Ronald Newman  
Co-operative Education  
*with high distinction*

Kathryn Louise Oraas  
*with high distinction*

Christopher Quizi

Jennifer Margarete Renaud  
Co-operative Education  
*with high distinction*

Jason E. Shaver  
*with high distinction*

Alexander William David Tomkins  
*with high distinction*

ENVIRONMENTAL

Damien Cote  
B.A.  
*with high distinction*

James A. Diak

Edward Perrott Hincks

Daniel Kgaje\*

Geoffrey Koodirile

Maggie Leon\*  
*with distinction*

Scott Alexander Macdonald

Mudlovu Otsile Mudlovu

Jamie Pelletier  
*with high distinction*

Stephanie Olivia Schreiner  
Co-operative Education  
*with distinction*

Erik Sean Tolonen  
Minor in Chemistry

Citra Wahyudi  
Minor in Business  
*with distinction*

SOFTWARE

Michael Soubine Chun  
*with high distinction*

Christopher Joonas Donaldson  
Software  
Co-operative Education  
*with distinction*

John Duff

Andrew Michael Dunbar  
Co-operative Education  
*with high distinction*

Matthew Stephen Felske

Peter Daniel Foo

Chow Yee Lim

Jeremy Mah

Elias Majic\*

Robert Mares

Sharif Mattar

Yevhen Rachitskiy  
Co-operative Education

**Sherwin Dic Dee Sim**  
Co-operative Education  
*with distinction*

**Ajanth Rogers Singherayor**  
Co-operative Education  
*with high distinction*

**Devin Joseph Steffler**  
Co-operative Education  
*with high distinction*

**Rajatheepan Thiagarajah**

**Kokulathas Thurairajah**

**Edgar Tomek**  
Co-operative Education  
*with high distinction*

**Simon Wing-Hang Tse**  
Co-operative Education  
*with high distinction*

**Endre Voros**  
*with distinction*

**George C. Walke**

**Sudarsha D. A. Wijenayake**  
Co-operative Education  
*with high distinction*

**Yong Zhang**  
*with high distinction*

### Bachelor of Architectural Studies

Associate Professor Lucie Fontein,  
Associate Director (Graduate) of the  
School of Architecture

Degrees conferred at Spring Convocation  
are awarded by Senate in February and  
in June. Degrees awarded in February are  
denoted by an asterisk (\*)

**Candice April Allen**

**Chloe Larissa Allin**  
*with high distinction*

**Jennifer Anne Nicolette Azzopardi**  
*with distinction*

**Patrick Bisson**  
*with high distinction*

**Mathieu Blais**  
*with distinction*

**Jay William Brauneisen**

**Mitchell Francis Chan**  
*with distinction*

**Carmen Lik Man Cheung**  
*with distinction*

**Chi Ying Cheung**

**Madalena M. Cheung\***  
Co-operative Education  
*with distinction*

**Karen Eleanor Conty**  
*with high distinction*

**Geraldine Camilla Dabu**  
*with high distinction*

**Nathan John Dykstra**  
*with high distinction*

**Leila Nathania Emmrys**  
*with high distinction*

**Bradley Emsley**

**Mu-Chih Peter Fan Chiang**  
Co-operative Education

**Kelly Ann Gartner**  
*with distinction*

**Da Hsuan Hsu**  
*with distinction*

**Nathan Tyler Jensen**  
Co-operative Education  
*with high distinction*

**Jon Nathan Jeronimus**  
*with distinction*

**Juan Carlos Jimenez Martinez**

**Maria Mercedes Jimenez Martinez**

**Edward Sung Ho Kim**  
*with distinction*

**William Klassen**  
*with high distinction*

**Vincent Pak Ho Ko**  
Co-operative Education

**Rhéal J. C. Labelle**  
*with distinction*

**Wai Tang Lam**  
*with distinction*

**Melanie Suzanne Lamontagne**  
*with high distinction*

**Selina Sze-Yu Leung**  
Co-operative Education  
*with high distinction*

**Veronique Leyten**  
Co-operative Education  
*with high distinction*

**Ophelia Chai Shing Liew**  
Co-operative Education  
*with distinction*

**Andrew MacIntosh**  
*with distinction*

**Tung Duong Tom Ngo**  
*with distinction*

**Ahmed Pouladi**

**Venkatesh Prabhu**  
*with distinction*

**Michael Putman**  
*with high distinction*

**Gerald Reibling**  
*with distinction*

**Erik Shin Rossmann**  
*with distinction*

**Dina Magdi Sarhane**  
*with distinction*

**Aba Simpson**  
*with distinction*

**Kyla Jane Simpson**

**Jessie Elicia Smith**  
*with distinction*

**Richard Smith**  
*with distinction*

**Edward Solodukhin**  
*with distinction*

**Morgan Alexander Tang**  
*with high distinction*

**Houng C. Te**  
Co-operative Education  
*with distinction*

**Amber Rochelle Trimble\***  
*with high distinction*

**Po Chieh Tseng**  
*with distinction*

**Nicolas Enrique Valenzuela**  
*with high distinction*

**Linn Kristin Waardahl**  
*with distinction*

**Alexsandra Wendzich**

**Al Rich Ting Yan Yeung**

**Anita Sze Men Yu**  
*with high distinction*



# *Medallists in the Graduating Class*

## **The Governor General's Medal - Bachelor's Level**

Awarded annually to a student standing at the head of the graduating class at the bachelor's level.  
Donor: Her Excellency the Governor General of Canada.

**Sahba Talebi Fard**  
*Bachelor of Engineering  
Communications  
with high distinction*

## **University Medals (Undergraduate)**

Awarded annually, when merited, to the graduating students standing highest in architecture, architectural studies, arts, commerce, computer science, engineering, humanities, industrial design, interfaculty studies, international business, journalism, mathematics, music, public administration, public affairs and policy management, science, and social work.

University Medal in Architecture  
**Karen Eleanor Conty**  
*Bachelor of Architectural Studies  
with high distinction*

University Medal in Engineering  
**Jeevithan Muttulingam**  
*Bachelor of Engineering  
Computer Systems  
with high distinction*

## **Senate Medals**

Awarded, when merited, to graduating students of outstanding academic achievement.

### **Undergraduate Level**

#### **Bachelor of Architectural Studies**

**Chloe Larissa Allin**  
*with high distinction*

**Selina Sze-Yu Leung**  
*with high distinction*

**Amber Rochelle Trimble**  
*with high distinction*

#### **Bachelor of Engineering (Civil)**

**Jeffrey Asher McRae**  
*with high distinction*

**Jean-Pierre Perron**  
*with high distinction*

#### **Bachelor of Engineering (Communications)**

**Sajeeth Cherian**  
*with high distinction*

**Ahmad Rasem**  
*with high distinction*

**Dravya Sharma**  
*with high distinction*

**Peyman Talebi Fard**  
*with high distinction*

**Sarah Anne Taylor-Falcioni**  
*with high distinction*

**Bachelor of Engineering (Computer Systems)**

**Benjamin Biron**  
*with high distinction*

**Randall Douglas Cameron**  
*with high distinction*

**David Alexander Cummings**  
*with high distinction*

**Abes Dabir**  
*with high distinction*

**Kambiz Frounchi**  
*with high distinction*

**Christopher Morgan King**  
*with high distinction*

**Kok Hang Steven Leon-Tang**  
*with high distinction*

**Jamie Robert Longmuir**  
*with high distinction*

**Jason Marling**  
*with high distinction*

**Maria Simsky**  
*with high distinction*

**Thomas Christian Von Moos**  
*with high distinction*

**Xi Zhao**  
*with high distinction*

**Bachelor of Engineering (Engineering Physics)**

**Wayne Bonnet**  
*with high distinction*

**Ryan Hunter Griffin**  
*with high distinction*

**David Thomas Jack**  
*with high distinction*

**Kathryn Louise Oraas**  
*with high distinction*

**Alexander William David Tomkins**  
*with high distinction*

**Bachelor of Engineering (Environmental)**

**Jamie Pelletier**  
*with high distinction*

**Bachelor of Engineering (Software)**

**Michael Soubine Chun**  
*with high distinction*

**Ajanth Rogers Singherayor**  
*with high distinction*

**Devin Joseph Steffler**  
*with high distinction*

**Simon Wing-Hang Tse**  
*with high distinction*

**Sudarsha D. A. Wijenayake**  
*with high distinction*

**Yong Zhang**  
*with high distinction*

*The following additions and/or corrections were made  
by Senate after publication of the 2005 Fall Convocation  
Program*

**Bachelor of Arts (Honours)**

Moshen Nasrin  
Honours in Film Studies

Mary-Anne Elizabeth Day  
Honours in Criminology and  
Criminal Justice  
Concentration in Sociology

David Alexander Goodhope  
Honours in Criminology and  
Criminal Justice  
Concentration in Psychology

Amanda Sheane  
Honours in English and Law

**Bachelor of Arts**

Melanie May Dorothea Cody  
Psychology  
*with distinction*

Aws Shahren  
Economics

Tiffany Wang  
Economics  
Minor in Business

Suzie Desrollines  
Psychology

**Bachelor of Commerce (Honours)**

Olga Dziunycz  
Honours  
Concentration in Accounting

Thomas Dean Lingard  
Honours

Alyyah Rhemtulla  
Honours  
Concentration in Information Systems

**Bachelor of Science**

Mike Robinson  
Chemistry









